

Meeting Minutes

June 18, 2014

Members

David Forfia, Electric Reliability Council of Texas (ERCOT)
Doug Houseman, EnerNex
Mark Knight, CGI
Tracy Markie, Engenuity
James Mater, Quality Logic
Jeff Taft, PNNL
Ken Wacks, consultant to Sensus Metering Systems Inc.

Members Not Present

Ron Ambrosio, IBM T.J. Watson Research Center
Ward Camp, Landis + Gyr
Jeff Gooding, California Edison
Mark Kerbel, REGEN Energy Inc.
Heather Sanders, CA-ISO
Tom Sloan, Kansas State Legislator

Members Emeritus

Erich Gunther, EnerNex Corporation
Paul De Martini, Newport Consulting

Support – Pacific Northwest National Laboratory (PNNL)

Sherry Kowalski, PNNL

Atefe Makhmalbaf, PNNL
Ron Melton, PNNL
Abhishek Somani, PNNL

Speakers and Guests

Haw Asgeirsson, DTE Energy
Anto Budiardjo, Point View Inc.
Phil Davis, Schneider Electric
Ed Cazalet, TeMix
John Chatterly, Fujitsu
Larry Colton, Echelon
Rish Ghatikar, LBNL
Ali Ipakchi, OATI
David Katz, Sustainable Resources Management
Kyle Haas, Maryland Energy Administration
Mark Handy, KenJiva Energy Systems
Terry Hill - Passive Houses
Larry Lackey, TIBCO Software, Inc.
David LeVee, Pwrcast
Dan Lubar, Relay Services
Scott McCormick, Building IQ
Terry Oliver, Bonneville Power Administration
Mark Patterson, CSIRO
Farrokh Rahimi, OATI
Leonard Tillman, Balch, Inc.
Anant Venkateswaran, GE Digital Energy

Administrative

Welcome and Administrative Business

Ron Melton, GWAC Administrator

Ron Melton called the meeting to order at 10:08 AM.

Ron Melton reviewed the agenda and read the proprietary information disclosure policy according to the bylaws to the GWAC members and guests.

Review of Action Items

Ron Melton, GWAC Chairman

Ron Melton reviewed the following action items from previous meetings:

- The Council will continue gathering feedback on Transactive Energy Framework and write a revision. This is an ongoing activity and a report was provided later in the meeting.
- Create supporting materials for TE Roadmap
 - Summary for Policy Makers (Mark Knight & James Mater) - This is an ongoing activity and a report was provided later in the meeting.
 - Cyber-Security Implications (Mark Knight & Doug Houseman) – Doug Housman will provide an update at the July web meeting.
 - Infographic (Ron Melton & Jack Eisenhower) Version 1.0 of the infographic has been created and can be found at GridWiseAC.org.
- Create and Edit a Set of TE Principles (Ron Melton, Stephen Knapp, Ken Wacks, Jack Eisenhower) - Version 1.0 of the principles has been created and is currently going through the review process and will be placed on GridWiseAC.org when complete.
- Send out an e-mail to Council members asking for contacts in Australia (Ron Melton and Sherry Kowalski) Ron Melton will complete this action by Friday, June 20, 2014.
- Invite Australian representative to Cal-ISO GWAC face-to-face meeting (Ron Melton)

Calendar Review

Ron Melton reviewed the calendar for the GWAC meetings and the upcoming outreach dates.

GWAC 2014 Web Meetings:

- July 23, 10:00 AM to 12:00 PM
- August 20, 10:00 AM to 12:00 PM
- Doodle Poll sent to determine the best October and November dates

GWAC 2014 Face-to-Face Meetings:

- September 10-11– Hosted by California-ISO in Folsom, California
- December 9 – Portland Oregon

GWAC Events:

- December 10-11, International Transactive Energy Conference, Portland OR

Sherry Kowalski will send out a poll to find a more suitable time for future web meetings. A couple of suggestions were to move the meeting's start time to later in the day or move to a different day, such as Thursdays.

Conference and Event Planning

Point View Dashboard

Anto Budiardjo

Council administration likes to provide a list of GWAC related meetings and conference but maintaining a relevant updated list can sometimes be challenging. Point View is offering a new tool that will help ease the difficulty of keeping track of meetings. Anto Budiardjo provided a demonstration of Point View's new dashboard. One can create a profile at

<https://www.pointview.com/> Find an event, follow and indicate attendance of an event and much more. The council will use this tool, which is imbedded in the Council's website, to help publicize future meetings.

GWAC Face-to-Face Meeting/Transactive Energy Workshop at California-ISO

Ron Melton, GWAC Administrator

The Transactive Energy Roadmap Workshop and GWAC meeting will be held on September 11-12, 2014 at the California-ISO in Folsom, CA. The workshop will be embedded into the meeting and consist of at least 8 hours and focus on the distribution side of the Transactive Energy Roadmap. Time will also be allotted to finalize assignments for GWAC led panels and presentations at the Transactive Energy Conference in December.

A room block has been established at Lake Natoma Inn in Folsom, CA and reservations can be made by calling 916-351-1500 or online at

<https://bookings.ihotelier.com/bookings.jsp?groupID=1227232&hotelID=13381>

The rough draft agenda is as follows:

- General theme – the value of transactive energy
- Possible topics:
 - Relation between economics and control – why they go together
 - Customer value / customer engagement
 - Transactive energy and state regulatory changes (with California focus)
 - Current approaches to renewable resource integration at Cal-ISO level

Paul De Martini and Farrokh Rahimi may present a paper on distribution systems.

Transactive Energy Conference

Ron Melton provided a status update on the 2nd International Energy Conference which will be held December 10-11 in Portland Oregon. The venue will be hosted by Portland General Electric at the World Trade Center in Portland, Oregon. A GWAC face-to-face meeting will be held half-day the day prior, on December 9.

The next planning committee meeting is scheduled for June 26, and the next program committee meeting is scheduled for June 19.

The Program Committee has confirmed Elliott Mainzer from Bonneville Power Administration and David Owens from Edison Electric Institute as conference keynote speakers. Potential speakers include Cheryl La Fleur and a DOE official. The conference international panel has Mark Paterson from CSIRO confirmed and the program committee is seeking suggestions for potential panelists.

The Hotel room block has been secured and the website is up and running and will be ready to open the registration soon.

Current action items include finalizing the call for papers. Ron Melton opened discussion on the program structure.

The TEC Program structure contains 2 parallel panel sessions each day for a total of 4 panel sessions. Each session followed by workshop. The panelists are to set up the workshop discussions.

The call for papers is behind. The workshop topics will drive the call for papers and Ron Melton has engaged the Council to help identify potential topics.

Ron Melton has received the following for possible workshop questions/topics:

- Business and Policy – this is probably the biggest barrier to transactive energy implementation
- From demand response to transactive energy – this is a blend of the architecture and business and policy topics focused on the operational issues that need to be dealt with in getting to transactive energy
- From passive customers to customers with intelligent energy management systems and smart appliances – how do we facilitate the transition to transactive and entice people want to participate?
- Security and Risk Management issues – Cyber-Physical, Privacy, and Market risk management

Once the workshop topics are identified and defined, we will be able to complete and release the call for papers.

Technical and Policy

Transactive Energy Infographic

Ron Melton, GWAC Administrator

The Transactive Energy Infographic is a one-page visual representation to help communicate transactive energy with various stakeholder groups. A sub-committee that consisted of Ron Melton, Mark Knight, David Forfia, Jack Eisenhauer and Lindsay Kishter developed and circulated version 0.9 to the Council for feedback. The working group reconvened and incorporated the comments from the Council Review of version 0.9. Version 1.0 is complete and posted on the GWAC website at:

http://www.gridwiseac.org/pdfs/te_infographics_061014_pnnl_sa_103395.pdf

Ron Melton asked that as the Council uses the infographic or gets comments from the smart grid community, they keep notes to support a future update and to identify other possible companion graphics. Discussion continued on a possible family of graphics and slides that could be used to socialize transactive energy.

Transactive Energy Framework Feedback

Mark Knight, GWAC Chairman

Ron Melton recapped the progress of the Transactive Energy Framework. The Council has received two forms of feedback Transactive Energy Framework. The Council has received specific comments on document elements consisting of edits and proposed new material, and broad general comments. Mark Knight created a comment matrix to aid in the revision and to track how the comments were resolved.

A working group was formed to tackle the resolution of the comments and feedback. The group consists of Mark Knight, Mark Kerbel, Tom Sloan and Ron Melton. The working group will report their progress at the July GWAC web meeting.

Transactive Energy Policy Paper

Transactive Energy Framework Summary for Policy Makers – This will be a three- page summary focused on the broad concepts of transactive energy. Mark Knight and James Mater are leading this project. A final draft is titled “Transactive Energy in 1000 Words” has been completed and is to be circulated to the Council for review and feedback.

California-ISA Symposium

A panel “Demonstrating tomorrow’s grid today; Lessons Learned from Innovators and Entrepreneurs” will be at the ISO symposium which occurs on Oct 22-23 in Sacramento.

The Symposium is the largest gathering of energy executives on the West Coast and has emerged as a premier forum for senior level discussions on key energy matters. The Symposium enables discussion between CEOs and VPs from entities in our wholesale markets and the ISO’s Board of Governors, senior officials from California Governor’s office, and commissioners of the California Public Utilities Commission and California Energy Commission, Water Board and Air Board.

Ali mentioned that there is limited space for vendor tables and the symposium usually sells out; if you plan to participate in the event, please register early.

DOE Meetings

DOE Smart Grid R&D Peer Review Presentation

DOE Smart Grid R&D Peer Review Presentation was well received and positive comments on the importance of the work made by all the reviewers. There were several questions about transactive energy and grid resilience. Ron Melton suggested that the Council needs to develop a white paper on this topic.

Ron Melton presented the FY 2015 plan at the review

- Education of regulators, policy makers and utility decision makers
- Coordination with SGIP, EPRI, EEI and others on related activities

- Planned Meetings and Work Products
 - 2nd International Transactive Energy Conference and Workshop – to be held in December and publish proceedings by Feb. 28th
 - Second and Third updates to Transactive Energy Framework – October 2014 (initial “roadmap”) and September 2015 (refined “roadmap”)
 - Collaborate with SGIP Architecture Committee on generic grid service definitions and apply them to transactive energy
 - Ongoing GWAC meetings and workshops

It was noted that the final plan may change; also the Annual Operating Plan is prepared.

DOE Electricity Advisory Committee Presentation

Ron Melton used the deconstructed infographic to create a presentation on transactive energy. The presentation was well received by the EAC members. The Committee asked the following questions:

- What is the role of customers and how can one foster customer engagement?
- Who owns what in the diagram (related to cost allocation type considerations)?

In addition, there was an interesting comment made during a subsequent panel about needing to consider “bi-directional” rate design, which is very transactive energy compatible.

Ron Melton suggested that Council members should become familiar with the DOE Grid Tech Team outputs because GWAC’s work is very supportive of the Tech Team’s work.

Australian Future Grid Forum

Mark Patterson, a member of CSIRO, discussed the “*Future Grid Forum: change and choice for Australia’s electricity system*”. CSIRO convened the Future Grid Forum that explores potential scenarios for Australia’s electricity future. The work focuses on the 2050 time horizon and examines 4 likely future scenarios:

- Set and Forget
- Rise of the Prosumer
- Leaving the Grid
- Renewables Thrive

Detailed information can be found at CSIRO’s website at: <http://www.csiro.au/Organisation-Structure/Flagships/Energy-Flagship/Future-Grid-Forum-brochure.aspx>

Approval of Minutes

Ron Melton, GWAC Chairman

The following meeting minutes were distributed to the Council by email for review and feedback.

- February 14, 2014 Web Meeting
- March 11-12, 2014 Face to Face Meeting
- April 9, 2014 Web Meeting
 - Correction from James Mater and David Forfia

Doug Houseman moved to approve the set of minutes with corrections, David Forfia seconded the motion and the motion passed.

Action Items Review

- Doug Houseman will provide an update on The Interoperability Context Setting Framework at the July web meeting.
- Work will continue on the Transactive Energy Principles, Policy Paper and Framework revision.
- Sherry Kowalski will send out a poll to find a more suitable time for future web meetings.
- “Transactive Energy in 1000 Words” to be circulated to the Council for review and feedback.

Adjourn

James Mater moved to adjourn the meeting, Doug Houseman seconded the motion and the meeting adjourned at 11:56 AM.